Amendments to the Claims:

1. (Currently amended) A method of detecting a retroviral genetic recombinant encoding a functional gag polypeptide and a functional pol polypeptide comprising:

a) introducing into a first cell a trans-viral vector system;

b) culturing said first cell to allow viral particle formation;

c) transducing a population of cells with a poplulation of viral ~~viarl~~ particles of step b)~~,~~ ~~wherein members of said viral particle population may comprise said recombinant;~~ wherein

~~d) providing in trans to~~ said population of cells comprises at least one helper function comprising an envelope polypeptide or a pseudotype~~pseudetype~~ thereof;

~~e) propagating said recombinant in the presence of said helper function and;~~

df) determining the presence of said recombinant having the functional gag polypeptide and the functional pol polypeptide.

2. (Previously presented) The method of claim 1 wherein said recombinant is integrated into the genome of said cells in said population.

3. (Previously presented) The method of claim 1 wherein said trans-viral vector system is a trans-lenti vector system.

4. (Previously presented) The method of claim 1 wherein determining the presence of said recombinant comprises an assay selected from one or more members of the group consisting of FISH, PCR, antigen-detection, Tat transfer, Gag transfer, and mobilization.

5. (Previously presented) The method of claim 1 wherein said recombinant comprises one or more genetic elements selected from the group consisting of retroviral cis-acting sequences and retroviral coding sequences, wherein said genetic elements facilitate reverse transcription and integration.

Claims 6 - 8 (Canceled)

9. (Original) The method of claim 1 wherein said recombinant is capable of mobilizing a nucleic acid sequence.

10. (Original) The method of claim 9 wherein said nucleic acid sequence is selected from one or more of the group consisting of a mobilizable marker gene, a retroviral nucleic acid sequence, and said recombinant.

11. (Canceled)

12. (Previously presented) The method of claim 10 wherein said marker gene is a selectable marker gene integrated within a chromosome of said cells in said population .

13. (Previously presented) The method of claim 12 wherein said marker gene imparts antibiotic resistance.

14. (Previously presented) The method of claim 13 wherein said marker gene imparts antibiotic resistance to puromycin.

15. (Original) The method of claim 10 wherein said marker gene expression is controlled by a promoter, said promoter selected from the group of promoters consisting of constitutive and inducible promoters.

16. (Original) The method of claim 10 wherein said marker gene is flanked by cis-acting sequences for encapsidation, reverse transcription, and integration.

Claims 17-59 (Cancelled)

60. (Previously presented) The method of claim 1, wherein said method is used to evaluate the risk of producing a replication-competent retrovirus from a retroviral-based vector.

61. (New) A method of detecting a retroviral genetic recombinant having gag and pol functions comprising:

a) providing a cell suspected of having said recombinant wherein said recombinant is formed from a trans-viral vector system; and,

b) determining the presence of said recombinant having said gag and pol functions.

62. (New) The method of claims 61, wherein said genetic recombinant comprises a functional gag polypeptide and a functional pol polypeptide.

63. (New) The method of claim 62, wherein said cell comprises at least one helper function.

64. (New) The method of claim 63, wherein said helper function comprises envelope or a psuedotype thereof.

65. (New) The method of claim 61, wherein said trans-viral vector system is a trans-lenti vector system.

66. (New) The method of claim 62, wherein said trans-viral vector system is a trans-lenti vector system.

67. (New) The method of claim 63, wherein said trans-viral vector system is a trans-lenti vector system.

68. (New) The method of claim 62, wherein said method is used to evaluate the risk of producing a replication-competent retrovirus from a trans-viral vector.

69. (New) The method of claim 61, wherein determining the presence of said recombinant comprises an assay selected from one or more members of the group consisting of FISH, PCR, antigen-detection, Tat transfer, Gag transfer, and mobilization.

70. (New) The method of claim 66, wherein determining the presence of said recombinant comprises an assay selected from one or more members of the group consisting of FISH, PCR, antigen-detection, Tat transfer, Gag transfer, and mobilization.